# Commonwealth of Kentucky Division for Air Quality

# PERMIT APPLICATION SUMMARY FORM

Completed by: Andrew True

GENERAL INFORMATION:	
Name:	TransMontaigne Product Services, Inc Paducah
	Terminal
Address:	233 Elizabeth Street
	Paducah, Kentucky 42003
Date application received:	August 5, 2008
SIC/Source description:	5171/Bulk gasoline terminal
Source ID #:	21-145-00052
Source A.I. #:	3071
Activity #:	APE20080001
Permit number:	V-06-016 R1
APPLICATION TYPE/PERMIT ACTIVITY:	
[ ] Initial issuance	[ ] General permit
[X] Permit modification	[ ] Conditional major
Administrative	[X] Title V
X_Minor	[ ] Synthetic minor
Significant	[X] Operating
[ ] Permit renewal	[ ] Construction/operating
COMPLIANCE SUMMARY:	
[ ] Source is out of compliance	[ ] Compliance schedule included
[X] Compliance certification signed	
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APPLICABLE REQUIREMENTS LIST:	CDC [V] CID
[] NSR [] NS	
	ESHAPS [] Other
[ ] Netted out of PSD/NSR [X]	Not major modification per 401 KAR 51:001, 1(116)(b)
MISCELLANEOUS:	
[ ] Acid rain source	
[ ] Source subject to 112(r)	
[X] Source applied for federally enf	orceable emissions cap
[ ] Source provided terms for altern	ative operating scenarios
[ ] Source subject to a MACT stand	lard (40 CFR 63.4530 Recordkeeping only)
[ ] Source requested case-by-case 1	
[ ] Application proposes new contro	ol technology
[X] Certified by responsible official	<del>- •</del>
[X] Diagrams or drawings included	
[ ] Confidential business information	
[ ] Pollution Prevention Measures	. , 11
[ ] Area is non-attainment (list poll	utants):
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### **EMISSIONS SUMMARY:**

Pollutant	Actual (tpy)	Potential (tpy)
VOC	44.28	272.83
NOx	NA	2.67
СО	NA	6.68
Single HAPs > 10 tpy	None	9*
Source wide HAPs > 25 tpy	None	22.5*

<sup>\*</sup>Plantwide emissions cap established in the Title V Operating Permit.

## **SOURCE DESCRIPTION:**

TransMontaigne Product Services, Inc. operates a bulk gasoline terminal located in Paducah, Kentucky (Paducah/Cairo area). It dispenses: diesel fuel; conventional gasoline; resin oil No.80; and jet A/kerosene. Currently, the terminal is using 13 internal floating roof storage tanks for gasoline. All of these gasoline storage tanks are existing, and were constructed prior to 1972. Six (6) diesel (low VP petroleum product) storage tanks are existing. Please refer to Section C - INSIGNIFICANT ACTIVITIES of the draft permit for a list of these facilities. Two loading racks are in operation. A two-bay unit with eleven (11) loading arms is located at the Paducah facility and a unit with fourteen (14) loading arms is located at the Riverway facility. VOC emissions from the Paducah and Riverway loading racks are controlled by a 95% efficiency John Zink Vapor Combustion Unit located at the Paducah terminal. The terminal complex currently processes 430,031,340 gallons/year of conventional gasoline, 374,701,450 gallons/year of distillate and 70,000,000 gallons/year of distillate for barge loading.

### MINOR REVISION

TransMontaigne Product Services Inc. applied for a Minor Revision to their Title V permit for modification/operation of Tank 4 (EP 11 (T-4)) and Loading Rack 04 (LR-1) to have the flexibility for ethanol storage and ethanol blending at their facility located in Paducah, Kentucky. Modifications to the facility proposed by TransMontaigne include: modifying tank 4 for ethanol storage; and adding ethanol blending equipment to loading rack 04 (LR-1). The facility will also be modifying the loading arms to load the blended gasoline/ethanol mix, bring ethanol into the facility via trucks, store ethanol in Tank 4, and then load the gasoline ethanol into trucks. Tank 4 and loading rack 04 are permitted for low vapor pressure products in existing permit V-06-016.

The floating roof on Tank 4 will have the existing liquid mounted primary seal and existing secondary rim mounted seal replaced with new ethanol compatible seals. The seal configuration may stay the same or it may be replaced with a primary mechanical shoe seal and a secondary wiper seal. The facility has requested that Tank 4 remain authorized to store gasoline (or other lower vapor pressure products) in the future.

TransMontaigne will not be adding any additional loading arms and/or risers as part of this project. The loading rack will be modified to dispense E-10 mix of gasoline and ethanol. TransMontaigne

will not load pure ethanol from the loading rack. As part of this project TransMontaigne will be modifying each of the existing 14 loading arms on loading rack 04 (LR-1). The source estimates that

the following components will be added to each existing loading arm: three flanged valves, two welded valves, six flanges not associated with valves, one meter, and one strainer. No changes will be made to the control device associated with loading rack 04 (LR-1) as part of this project and therefore; no changes to the existing CAM plan are required at this time.

The existing annual throughput limitation of 45,000 gallons/hour and 270,106,200 gallons/year on loading rack 04 (LR-1) will not be adjusted as part of this project. Additionally the 10,953,725 gallons/year throughput limit permitted for tank 4 and the facility wide throughput limit of 430,031,340 gallons of gasoline per year will not be changed as part of this modification.

When tank 4 was permitted for gasoline service, the facility estimated emissions to be 2.12 tons/year of VOC. VOC emissions from tank 4 after the proposed modifications are estimated to be 0.111 tons per year. The fugitive emissions from the new components are estimated to be 0.07 ton per year of additional VOCs. Therefore it is estimated that there will be a net decrease in emissions from this change since the combined total of the new VOC emissions is 0.181 tons/year versus the existing emission rate of 2.12 tons/year.

Tank 4 is not currently subject to the New Source Performance Standards (NSPS) in 40 CFR 60 Subparts K, Ka, or Kb because the tank was constructed in 1939. The changing of the seals to make them compatible with ethanol does not make the tank subject to any of these requirements.

The terminal is subject to the NSPS requirement in 40 CFR 60 Subpart XX. The addition of ethanol blending capability to the loading rack does not trigger any new requirements.

The facility is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) in 40 CFR 63 Subpart BBBBBB. The compliance date for this rule is January 10, 2011.

### EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

VOC emissions from the Paducah and Riverway loading racks are controlled by a John Zink Vapor Combustion Unit located at the Riverway terminal. Emissions are below the standard of 35 grams/liter of gasoline transferred. All gasoline storage tanks have floating roofs. Through recordkeeping and reporting, the terminal will maintain parameters which will ensure operation below any emission limits or standards. Additionally, as established in the initial Title V operating permit, V-99-021, the plant is not a major source of HAP emissions, as defined at 40 CFR 63.2. Therefore, the requirements pursuant to 40 CFR 63 for major HAP emission sources, including 40 CFR 63, Subpart R, *National Emission Standards for Hazardous Air Pollutants for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)*, do not apply. Enforceable source-wide HAP emission limitations have been incorporated into Section D of the permit.